

C-130 Upgrade of Gas Turbine Compressor GTC85-71A to SHORT-POD® APU GTCP85-180L

Improved Reliability. Reduced Cost of Ownership.

Lockheed approved
Upgrade Kit modernizes
APU system.



Overview

Kellstrom Defense (formerly Kellstrom Defense Aerospace, Inc.) is the Original Equipment Manufacturer (OEM) for the C-130 Short-Pod® Auxiliary Power Unit Upgrade Kit, which is used to modernize Pre-1974 production C-130B through early C-130-H Aircraft which were delivered with Gas Turbine Compressors (Model GTC85-71A) and Air Turbine Motor. Kellstrom Defense's (KD) experience with the design and continuous improvement of this modernization kit has enabled us to deliver more than 75 Short-Pod® kits to 15 international and domestic customers.

Background

As platforms age, OEM support for sustainment diminishes and end-users tasked with maintaining operational readiness are faced with critical supply chain deficits. Kellstrom Defense offers its military customer base legacy aircraft solutions that address these shortfalls. We are a global provider of comprehensive support for U.S. manufactured legacy defense platforms including fighters, transports, patrol aircraft and helicopters. Our "Total Support" approach encompasses strategic distribution, repair & overhaul, engineering & manufacturing, modernization solutions and overall program management.

KD's Engineering & Manufacturing Division continues to grow its capabilities in order to keep up with the legacy aftermarket demand for engineering solutions, including the re-design and modernization of aircraft systems.

Business Need

The original Gas Turbine Compressor C-130 B-H Aircraft delivered prior to 1974 has a very low Mean Time Between Unscheduled Repairs (MTBUR), as well as a marginal capability to produce sufficient pneumatic power to reliably

start the T56 engines. As the GTC85-71A wears through normal use, it's pneumatic power production degrades and ultimately reaches a point where it no longer can start the engines independent of ground power carts. Additionally, the GTC85-71A is unable to power either one of the aircraft Environmental Control Systems at normal operation. Lastly, the obsolete GTC85-71A is operable on the ground only, which means that it's power production are not available in flight, even in emergencies.

Solution

KD's Short-Pod® APU Upgrade Kit is a Lockheed approved solution that removes the GTC85 and the Air Turbine Motor and installs a new GTCP85-180L APU system. The kit includes all of the components needed, including hardware, technical/IPC/Flight manual upgrades, control panel, new Honeywell engine, improved cowling, engineering support for installation, ground and flight crew training, etc.

Benefits

In addition to modernizing the Auxiliary Power Unit System, KD's Short-Pod® APU offers much improved reliability, greater MTBUR, lower cost of ownership, greater mission autonomy due to secure engine starts and ECS operation on the ground without main engines or GSE support. This solution is operable while airborne, providing added margin of safety and back-up source for pneumatic and electrical systems while airborne.



Kellstrom Defense

853 Via Alondra
Camarillo, CA 93012
T: 805.446.2700
F: 805.446.2800
www.kellstromdefense.com

Armando Boucourt

VP, Business Development

+1.954.538.2483
armando.boucourt@kellstromdefense.com